# **Job Description**

# **Principal Systems Administrator**

JOB TITLE: PRINCIPAL SYSTEMS ADMINISTRATOR

**DEPARTMENT: INFORMATION & COMMUNICATIONS TECHNOLOGY** 

**SALARY BAND:** 

**WORK STATION: KUKUM CAMPUS** 

#### **Job Summary**

1. The Principal Systems Administrator is Responsible for the technical design, planning, implementation, and the highest level of performance tuning and recovery procedures for mission critical enterprise systems.

2. Serves as a technical expert in the area of system administration for complex operating systems.

3. Recommends the redesign and configuration of operating systems and system applications.

4. Investigates and analyzes feasibility of system requirements and develops system specifications.

5. Identifies methods and solutions in order to provide a high level of service to staff and students of the University.

6. Performs minimum supervision of technical staff.

7. Must be a team player.

# **Duties and Responsibilities**

- 1. Provide support for Systems administrators
- 2. Provide support for network components inclusive of server configurations, emergency restoration services, backups and maintenance.
- 3. Manages the day-to-day operations of host systems (servers) by monitoring their performance, configuration, maintenance and repair. Ensures that records of system downtime and equipment inventory are properly maintained. Applies revisions to host system firmware and software.
- 4. Work with vendors to assist support activities.
- 5. Develop new system and application implementation plans, custom scripts and testing procedures to ensure operational reliability. Trains technical staff in how to use new software and hardware developed and/or acquired.
- 6. Supervise Operations staff including hiring, training, evaluating and disciplining. May guide or provide work direction to technical staff, contract staff and/or student employees. Determines appropriate coverage for all hours of operation.
- 7. Perform troubleshooting as required. As such, leads problem-solving efforts often involving outside vendors and other support personnel.
- 8. Establish, maintain and manage users Unix accounts, VMWare and Microsoft.
- 9. Install, modify and maintain systems and utility software on server computer systems. Provides server support related to other software.

- 10. Establish guidelines and methods for the installation and management of the host operating systems, disk arrays, fiber channel switches and other components.
- 11. Ensure high availability and acceptable levels of performance of University critical host resources.
- 12. Develop procedures to maintain security and protect systems from unauthorized use, acts of nature and user abuse.
- 13. Develop procedures, programs and documentation for backup and restoration of host operating systems and host-based applications.
- 14. Develop and coordinate project directions and schedules to maximize benefits and minimize impacts on the University.
- 15. Coordinate with Principle Systems Administrator in planning and implementation of projects for server operations and enterprise systems administration.
- 16. Develop tools, procedures, and training sessions for Operations, User Support and Systems Development staff to assist with work.
- 17. Manage the SINU data center and host systems including hardware, software and equipment such as air-conditioning system, UPS and fire protection system.
- 18. Stay current with technological developments in systems administration technology and recommends ways for University to take advantage of new technology.

- 19. Provide, maintain and perform Active Directory Administration for staff and students.
- 20. Maintain servers hosting Student Management System, Attache', Library (Koha and Dspace), email Exchange, DocuShare, Moodle etc.
- 21. Provide assistance and administration of all server hardware and software.
- 22. Supervise connectivity of network communications between various platforms.
- 23. Coordinate administration and technical transition activities with system administrators.
- 24. Provide evaluation and record of hardware and software specifications and requirements.
- 25. Ensure to install and operate systems equipment in accordance with University policies.
- 26. Provide operational support needed to support current University strategic plan.
- 27. Provide evaluation, communication and environment assistance for data conversions.
- 28.Implement migration of existing enterprise servers to new consolidated enterprise servers, if/when needed.
- 29. Integrate all servers to monitor tools as well as scripts to reduce downtime and enhance resource efficiencies.
- 30. Knowledgeable on Continuous Diagnostics and Mitigation (CDM) technical requirements.

- 31. Understand his/her role in CDM activities.
- 32. Design tests and implements state-of-the-art secure operating systems, networks, and database products, including design of high level dashboards, using data feeds from different network tools.
- 33. Involve in a wide range of security issues including use of Cyber Security tools, whitelisting, blacklisting activities.
- 34. May prepare security reports for the University administration.
- 35. As a lead worker doing the work similar to those in the work unit, responsibility for training, instruction, setting the work pace and possibly evaluating performance is required.
- 36. Responsibilities sometimes require working evenings and weekends and sometimes with little advanced notice.
- 37. No budget responsibility although there may be a need from time to time, if/when required.
- 38. Incumbent will perform all of the above responsibilities and other related duties as directed by the Director ICT through Principle Systems Administrator

The applicant must possess following qualifications and experience:

- Degree in Computer Science and Information Technology or related discipline from a recognized university.
- Certifications in VMWare: VCA and VCP; Linux: LFCS and Linux+ CompTIA; and Microsoft Windows Server: MCSA and MTA, Management etc.

- 3. Ten (10) years' work experience in complex systems design, programming and systems software and support.
- 4. Knowledge of Programming languages and operating systems, current equipment and technologies in use; VMWare, Linux and Microsoft systems administration, enterprise backup and recovery procedures and system performance monitoring tools.
- 5. Must have the knowledge and experience of VMWare, Linux and Microsoft server installation, operation and maintenance.
- 6. Effective project management techniques, principles and practices of effective management and supervision.
- 7. Ability to plan, organize and document complex system design activities and to configure systems to be consistent with University policies/procedures.
- 8. Communicate technical/complex information both verbally and in writing.
- 9. Establish and maintain cooperation, understanding, trust and credibility.
- 10. Perform multiple tasks concurrently and respond to emergency situations effectively.

#### **Work Environment**

Incumbent is required to provide support for University IT services.

The successful applicant will be required to do a mandatory police background checks and medical examination prior to taking up the post.

The employee typically works in an office environment and uses a computer(s), test equipment and software, telephone and other office equipment as needed to perform duties. This position will sometimes require significant work in other office areas and locations. Respect for and understanding of those various work environments is necessary. Work may involve travel for training and meetings from time to time. The employee may encounter frequent interruptions throughout the workday. The employee is regularly required to sit, talk, or hear, frequently required to use repetitive hand motion, handle or feel, and to stand, walk, reach, bend, push, pull and lift up to at least 10 Kg. Occasionally required to push, pull and lift up to 25 Kg. The physical demands are representative of those that must be met by an employee to successfully perform the essential functions of this job. Requirements are representative, but not all inclusive of minimum levels of knowledge, skills, and abilities. To perform this job successfully, the incumbent must be able to perform each essential duty satisfactorily. This job description in no way states or implies that these are the only duties to be performed by an employee occupying this position. He/she must be a team player. The incumbent may be required to perform other related duties as assigned, to ensure workload coverage. He/she is required to follow any other job-related instructions and to perform any other job-related duties as requested by Director ICT.

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